The Thermo Scientific Orion 3-Star Plus pH meters are ideal for a variety of pH measurements – water, media, beverage, process water.

# Thermo Scientific Orion 3-Star Plus

**pH Meters** 







#### **Features and Benefits**

- Simultaneous display of pH or mV, and temperature measurements on the backlit LCD
- The Thermo Scientific Orion SMART STABILITY™ and SMART AVERAGING™ functions for automatically optimized accuracy, precision and response time
- Temperature calibration capability
- pH calibration of up to 5 points with calibration alarm
- Automatic buffer recognition of USA, NIST and DIN buffers
- Storage of up to 10 individually password protected methods for easy retrieval of operation procedures
- Datalog up to 1000 points with time and date stamp

- Average slope and slope of segment printed with pH measurements
- RS232 port for data downloads and communication
- Benchtop units can control an autosampler and the 096010 stirrer probe (each sold separately)
- Benchtop units are splashproof with an IP54-rated housing and include a universal power supply
- Portable units are waterproof with an IP67-rated housing and run for over 2,000 hours on four AA batteries
- 3 year meter replacement warranty



# Thermo Scientific Orion 3-Star Plus pH Meters

Range	- 2.000 to 19.999
Resolution	0.1, 0.01, 0.001
Relative Accuracy	± 0.002
Range	± 1999.9
Resolution	0.1
Relative Accuracy	$\pm$ 0.2 or 0.05%, whichever is greater
Range	- 5 to 105 °C
Resolution	0.1 up to 99.9 °C, 1.0 over 99.9 °C
Relative Accuracy	± 0.1 °C
	Resolution Relative Accuracy Range Resolution Relative Accuracy Range Resolution

### **Ordering Information**

Meters Only				
Cat. No.	Package			
1112000	Includes benchtop meter, universal power and user guide			
1212000	Includes portable meter, batteries and user guide			
Portable Meter Kits				
Cat. No.	Sensor (s)	Accessories and Solutions		
1212001	9107BNMD Low maintenance epoxy pH/ ATC Triode electrode	Beaker  Electrode storage chamber  Helectrode storage solution  5 x 60 mL bottles)  Helectrode storage solution  5 x 60 mL bottles)  Hand field case  Hand field case		
1212002	5107BNMD No Cal refillable pH/ATC electrode	Beaker  Helectrode storage solution (5 x 60 mL bottles)  Have to the storage solution (5 x 60 mL bottles)  Hard field case  Hard field case		
1212005	8107BNUMD ROSS Ultra low maintenance pH/ATC Triode Electrode	Beaker  Electrode storage chamber  ROSS electrode storage solution (pint bottle)  pH 4.01, 7.00, 10.01 buffers (10 x 15 mL pouches)  Hard field case		
1212501	9107BNMD Low maintenance epoxy pH/ ATC Triode electrode	Beaker  Electrode storage chamber  Helectrode storage solution  Kanger Solution  Helectrode storage chamber  Helectrode storage chamber  Helectrode storage chamber  Helectrode storage solution  Helectrode storage solut		
1212503	9179BNMD Low maintenance epoxy ORP/ATC Triode electrode	Meter impact jacket with electrode storage chamber     ORP standard (5 x 60 mL bottles)     Soft field case		
1212101	9107BNMD Low maintenance epoxy pH/ ATC Triode electrode	_		

## **Ordering Information** (cont'd)

Benchtop Meter Kits		
Cat. No.	Sensor (s)	Accessories and Solutions
1112001	9157BNMD refillable epoxy pH/ATC Triode electrode	<ul> <li>Swing arm electrode stand</li> <li>pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)</li> </ul>
1112003	<ul> <li>8102BNUWP ROSS Ultra refillable glass pH electrode</li> <li>927005MD Epoxy ATC probe</li> </ul>	<ul> <li>Swing arm electrode stand</li> <li>pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)</li> </ul>
1112004	<ul> <li>9172BNWP Sure-Flow refillable glass pH electrode</li> <li>927007MD Stainless steel ATC probe</li> </ul>	<ul> <li>Swing arm electrode stand</li> <li>pH 4.01, 7.00, and 10.01 buffers and pH electrode storage solution (pint bottles)</li> </ul>
1112006	8102BNUWP ROSS Ultra refillable glass pH electrode     927005MD Epoxy ATC probe	Swing arm electrode stand     pH 4.10, 6.79, and 9.15 pure     water buffers and pH electrode     storage solution (pint bottles)     pHISA adjuster solution     (5 x 60 mL bottles)
1112201	9157BNMD Refillable epoxy pH/ATC Triode electrode	Swing arm electrode stand
1112202	<ul> <li>8172BNWP ROSS Sure-Flow refillable glass pH electrode</li> <li>927006MD Glass ATC probe</li> </ul>	Swing arm electrode stand
1112203	9156APWP AquaPro low maintenance epoxy pH electrode	Swing arm electrode stand
1112204	9107BNMD Low maintenance epoxy pH/ATC Triode electrode	Swing arm electrode stand
1112205	<ul> <li>9156BNWP Refillable epoxy pH electrode</li> <li>927007MD Stainless steel ATC probe</li> </ul>	Swing arm electrode stand
1112104	9157BNMD Refillable epoxy pH/ATC Triode electrode	_
1112002	-	Swing arm electrode stand

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